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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/353,805	01/27/2003	William A. McCarty	KSCII.007A	7689	
20995 KNORRE MA	7590 04/09/2007 RTENS OLSON & BEAI	RLLP	EXAM	INER	
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FOURTEENTH FLOOR IRVINE, CA 92614			ART UNIT	PAPER NUMBER	
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SHORTENED STATUTOR	Y PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE		
3 MO	NTHS	04/09/2007	ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com eOAPilot@kmob.com

	Application No.	Applicant(s)				
Office Action Cummon.	10/353,805	MCCARTY ET AL.				
Office Action Summary	Examiner	Art Unit				
	Lun-See Lao	2615				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions-ef time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period was a failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	I. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>08 Ja</u>	anuary 2007.					
	action is non-final.					
3) Since this application is in condition for allowar		secution as to the merits is				
closed in accordance with the practice under E						
Disposition of Claims	•					
4)⊠ Claim(s) <u>1-64</u> is/are pending in the application.	,	•				
4a) Of the above claim(s) is/are withdraw						
5) Claim(s) is/are allowed.	ı					
6)⊠ Claim(s) <u>1-64</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r					
10) The drawing(s) filed on is/are: a) acce		- - - - - -				
Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correcti		• •				
11) The oath or declaration is objected to by the Ex						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a)	-(d) or (f).				
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents		on No.				
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau						
* See the attached detailed Office action for a list of	of the certified copies not received	d.				
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Attachment(s)  1) ☑ Notice of References Cited (PTO-892)	4) 🗖 Intention Comment					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)	PIO-413) te				
3) Information Disclosure Statement(s) (PTO/SB/08)	5) D Notice of Informal Pa					
Paper No(s)/Mail Date <u>12-27-2006</u> .	6)					

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#### **DETAILED ACTION**

#### Introduction

1. This action is response to the amendment filed on 01-08-2007. Claims 6 and 33 have been amended and claims 65-116 have been cancelled. Claims 1-64 are pending.

## **Double Patenting**

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ-645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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3. Claims 1-64 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-46 and US application number 10/783,718. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Consider claims 1-64, substantially all the claimed steps in these claims were recited in claims 1-46 of the application 10/783,718, such as the steps of: "a method for providing an audio signal and a control signal that is generated by an input device to a remote loudspeaker via a network, the method comprising: receiving an audio signal from the input device; detecting a characteristic associated with the audio signal; coding the characteristic into a control signal; and transmitting the audio signal and the control signal to a loudspeaker via the network " (see US patent application 10/783,718, claims 1-46, page 32 line 2-page 35 line 9).

Because claims 1-64 of US patent application 10/353,805 are similar in scope to claims 1-46 of the US patent application 10/783,718 with obvious wording variation, they are both describing a transmitter configured to receive at least a second portion of the audio signal from the device and transmit audio signals to a remote loudspeaker. Claims 1-64 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-46 of U.S. Patent application 10/783,718.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

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## Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claim1-5, 10-25, 33-37 and 42-57 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson (US PAT. 5,406,634).

Consider claim 1, Anderson teaches a method for providing an audio signal and a control signal that is generated by an input device to a remote loudspeaker via a network (see figs.1, 2, 7), the method comprising:

receiving (receiver 71) an audio signal (digital audio data) from (via transmission line 70) the input device (13,15) (see col. 2 lines 17-28, col. 3 line 33 - col. 4 line 46); detecting (DSP 72/32 running control program, col. 4, lines 58-61; col. 5, lines 21-25) a characteristic (speaker unit address) associated with the audio signal (control message, col. 4, lines 47-57);

coding the characteristic (override control parameters, reset the speaker unit address) into a control signal (control message including speaker unit address) (see col. 5, lines 1-11; col. 7, lines 10-23); and

transmitting (74, 76) the audio signal and the control signal to a loudspeaker (next intelligent speaker unit) via the network (ring network) (see col. 6, line 66 – col. 7, line 23).

Consider claim 33, it is the system claim corresponding to the method claim 1. See previous method claim 1 rejection.

Consider claims 2-5, Anderson teach the method further comprising: decoding (see fig.2, 32,35) the control signal at the loudspeaker (39); manipulating the audio signal based on the decoded control signal; and providing the manipulated audio signal to the loudspeaker (22) for broadcast (see col. 4 line 33-68); and the method of further comprising digitally amplifying the audio signal (see fig.6 and co. 4 line 33-68); and receiving (see figs 1-2) an address signal which is associated with the loudspeaker (22), the audio signal, and the control signal; coding (12,32) the address signal; transmitting (16) the address signal via the network (24,26 and see col. 2 line 17-28) to the loudspeaker (22) and to a next loudspeaker (22); decoding the address signal at the loudspeaker (22); decoding the address signal is associated with the loudspeaker (22); and broadcasting the audio signal at the loudspeaker (22); and broadcasting the audio signal is associated with the loudspeaker (22); and broadcasting the audio signal at the next loudspeaker (22) if the address signal is associated with the next loudspeaker (22 and see col. 3 line 63-col. 4 line 68); and the method of the network is wired (see fig.1 and col. 2 line 17-28 and col. 3 line 33-67).

Consider claims 35-37, they are the system claims corresponding to method claims 3-5. Thus note claims 3-5 respectively for rejection.

Consider claims 10-19, Anderson teaches converting the audio signal from an analog form to a digital form (see fig.1, 12) prior to transmitting (16) the audio signal (see col. 3 line 35-col. 4 line 46); and the detected control signal is analog (see fig.2, 37); and the

audio signal is digital (15); and the detected control signal is digital (32, DSP); and the control signal is a volume level (see fig.6); and the control signal is a balance level (see fig.6); and the control signal is a subbass level (read on low frequency and see col.6 lines 53-65); and the control signal is a destination source see col. 3 line 33-col. 4 line 68); and the control signal is a sound processing selection (32 DSP and see col. 3 line 33-col. 4 line 68).

Consider claims 42-51, they are the system claims corresponding to method claims 10-19. Thus note claims 10-19 respectively for rejection.

Consider claims 20-25, Anderson teaches that the control signal is an equalizer level (see fig.6 and col. 6 line 53-65); and the control signal is an address (see col. 4 line 33-58); the control signal is a power on; and the control signal is a power off (by DSP switch module 34 and see col. 4 line 33-58); and the control signal is a time delay; and the control signal is a phase delay (see col. Col. 2 line 17-64).

Consider claims 52-57, they are the system claims corresponding to method claims 20-25. Thus note claims 20-25 respectively for rejection.

Consider claim 34, Anderson teaches a Digital Signal Processor (DSP) (see fig.2, 32) module configured to manipulate the audio signal based on the extracted control signal-(see col.3 line 63-col. 4 line 68).

# Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 6-9, 32, 38-41 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US PAT. 5,406,634).

Consider claims 6-9, Anderson fails to teach that the network is a powerline; and the network is wireless; the network is RF; and the network is IR. While Anderson teach a network system, Anderson does not limit his network to any specific kind. Networks of many kinds are well known in the art (office notice is taken).

Therefore, it would have been obvious that the network system as taught by Anderson could have been a powerline network; or a wireless network; or a RF network; or an IR network. Since the system of Anderson would have operated well using any of these kinds of network.

Consider claims 38-41, they are the system claims corresponding to method claims 6-9. Thus note claims 6-9 respectively for rejection.

Consider claim 32, Anderson does not teach that the loudspeaker is a headphone. However headphone is well known in the art (the office notice is taken). Therefore, it would have been obvious that the speaker system as taught by Anderson could have used the headphone so that less disturbance cloud have been caused to people surrounding the user.

Consider claim 64, it is the system claim corresponding to the method claim 32. See previous method claim 32 for rejection.

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8. Claims 26-29 and 58-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US PAT. 5,406,634) in view of Chang et al. (US PAT. 6,507,273).

Consider claims 26, 28, Anderson does not teach automatically powering a transmitter in response to receiving the audio signal from the input device; and automatically powering off the transmitter in response to not receiving the audio signal from the input device for a period of time.

However, Chang teaches transmitter (see fig.1, 30) in response to receiving the audio signal from the input device (other computer, 30); and automatically powering off the transmitter in response to not receiving the audio signal from the input device for a period of time (read on automatically power on/off at a specified time and see col.2 line 33-col. 3 line 44).

Therefore, it would have been obvious to one of the ordinary skill in the at the time the invention was made to combine the teaching of Chang into Anderson to provide more efficiency communication system.

Consider claims 27, 29, Anderson fails to teach automatically powering a receiver in response to receiving the audio signal and the control signal via the network; and automatically powering off the receiver in response to not receiving the audio signal and the control signal via the network.

However, Chang teach automatically powering a receiver (see fig.1, 30) in response to receiving the audio signal and the control signal via the network (see col. 2 line 33-

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col. 3 line 44); and automatically powering off the receiver in response to not receiving the audio signal and the control signal via the network (see col. 2 line 33-col. 3 line 44).

Therefore, it would have been obvious to one of the ordinary skill in the at the time the invention was made to combine the teaching of Chang into Anderson to provide more efficiency communication system.

Consider claims 58-61, they are the system claims corresponding to method claims 26-29. Thus note claims 26-29 respectively for rejection.

9. Claims 30-31 and 62-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US PAT. 5,406,634) in view of Bader (US PAT. 7,043,671).

Consider claims 30-31, Anderson does not clearly teach that the control signal is in an  $1^2$ C format and the audio signal is an inter IC sound.

However, Bader teaches that the control signal is in an l<sup>2</sup> C format (well known) and the audio signal is an inter IC sound (see fig.6 and col.17 line 23-45).

Therefore, it would have been obvious to one of the ordinary skill in the at the time the invention was made to combine the teaching of Bader into Anderson to provide a cheaper communication system.

Consider claims 62-63, they are the system claims corresponding to method claims 30-31. Thus note claims 30-31 respectively for rejection.

# Response to Arguments

10. Applicant's arguments filed 01-08-2007 have been fully considered but they are not persuasive.

Regarding to the argued double patenting rejection, the rejection stands until a proper terminal disclaimer is filed.

Applicant argued, regarding claims 1 and 33, that Anderson does not teach ."detecting a characteristic associated with the audio signal", "coding the characteristic into a control signal", and a transmitter module configured to receive, detect and code. (Remarks, page 9, first paragraph).

The examiner respectfully disagrees. As discussed in the rejection of claim 1, Anderson teaches receiving (receiver 71, via transmission line 70) an audio signal (digital audio data) from a input device (13,15) (see col. 2 lines 17-28, col. 3 line 33 - col. 4 line 46); detecting (DSP 72/32 running the control program, col. 4, lines 58-61; col. 5, lines 21-25) a characteristic (speaker unit address) associated with the audio signal (control message, col. 4, lines 47-57); coding the characteristic (override control parameters, reset the speaker unit address) into a control signal (control message including speaker unit address) (see col. 5, lines 1-11; col. 7, lines 10-23); and transmitting (74, 76) the audio signal and the control signal to a loudspeaker (next intelligent speaker unit) via the network (ring network) (see col. 6, line 66 – col. 7, line 23). The transmitter module of Anderson comprises the system elements that perform the operations discussed above. In other words, the teaching of overriding/resetting the speaker unit address in the control message and the subsequent transmission of the

regenerated control message to the next intelligent speaker unit of the network meets the invention of claims 1 and 33 as recited.

\_Therefore, applicant's arguments are not persuasive.

### Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

- 12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yang (US PAT. 6,445,369) is cited to show other related wire, wireless, infrared, and powerline audio entertainment systems.
- 13. Any response to this action should be mailed to:

Mail Stop \_\_\_\_(explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
Facsimile responses should be faxed to:
(571) 273-8300

Hand-delivered responses should be brought to:
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lao, Lun-See whose telephone number is (571) 272-7501. The examiner can normally be reached on Monday-Friday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian, can be reached on (571) 272-7848.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 whose telephone number is (571) 272-2600.

Lao, Lun-See L.S.
Patent Examiner
US Patent and Trademark Office
Knox 571-272-7501

Date 03-22-2007

VIVAAN CHIN

SUPERVICE AT PACCET EXAMINER

TECHNOLOGY CLL " IT REMA

PTO/SB/08 Equivalent

# ORMATION DISCLOSURE STATEMENT BY APPLICANT

(Multiple sheets used when necëssary)
SHEET 1 OF 1

	F 10/30/06 Equivalent
Application No.	10/353,805
Filing Date	January 27, 2003
First Named Inventor	McCarty et al.
Art Unit	2615
Examiner	L. S. Lao
Attorney Docket No.	KSCII.007A

	U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No.	Document Number Number - Kind Code (if known) Example: 1,234,567 B1	Publication Date MM-DD-YYYY	Name of Patentee or Applicant	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	
/LL/	1	6,754,354	6/2004	Lokhoff		
/LL/	2	2003/0095096	5/2003	Robbin et al.		
	3	2002/0135513	9/2002	Paschen et al.		
	4	5,428,341	6/1995	Takahashi		
	5	2004/0097851	5/2004	Inada et al.		
	6	2004/0131193	7/2004	Kitamura		
	7	2004/0062270	4/2004	Son et al.		
	8	6,445,369	9/2002	Yang et al.		
	9	2002/0145509	10/2002	Karny et al.		
	10	5,491,755	2/1996	Vogt et al.		
V	11	5,661,848	8/1997	Bonke et al.		
7CL/	12	2004/0250273	12/2004	Swix et al.		
/LL/	13	2002/0101357	8/2002	Gharapetian	·	

FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No.	Foreign Patent Document Country Code-Number-Kind Code Example: JP 1234567 A1	Publication Date MM-DD-YYYY	Name of Patentee or Applicant	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	т1
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		NON PATENT LITERATURE DOCUMENTS		
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Examiner Signature /Lun Lao/ Date Considered 03/21/2007

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

T<sup>1</sup> - Place a check mark in this area when an English language Translation is attached.

#### Application/Control No. Applicant(s)/Patent Under Reexamination 10/353,805 MCCARTY ET AL. Notice of References Cited Examiner Art Unit ı Page 1 of 1 Lun-See Lao 2615 **U.S. PATENT DOCUMENTS** Document Number Country Code-Number-Kind Code Date Name MM-YYYY Classification US-6,445,369 Α 09-2002 Yang et al. 345/82 US-В US-С US-D US-Ε US-F US-G USн US-US-J USĸ US-US-М FOREIGN PATENT DOCUMENTS Document Number Date Country Code-Number-Kind Code MM-YYYY Country Name Classification Ν 0 Р Q R s Т **NON-PATENT DOCUMENTS** Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) U W

A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office PTO-892 (Rev. 01-2001)

**Notice of References Cited** 

Part of Paper No. 20070321